

20dB DC Bias Attenuator 50 Ohm TNC Male (Plug) to 50 Ohm TNC Female (Jack) Up to 3GHz Rated to 2 Watts Brass Tri-Metal Body, 1.35:1 VSWR

Fairview Microwave carries a wide range of fixed attenuators with a broad selection of attenuation levels, frequency ranges, and power dissipation ranges. RF microwave attenuators (also known as RF pads) lower the amplitude of a signal (attenuate) a known amount and can be used in a wide variety of applications. These attenuator pads are used when a signal needs to be reduced to protect measurement equipment or other circuitry, to extend the range of power meters and amplifiers, and to impedance match circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Fairview Microwave carries one of the largest in-stock varieties and ships them same day. The FMAT7449-20 is a 20 dB DC passing Fixed Attenuator that operates from 100 MHz to 3 GHz and is rated to 2 Watts and 0.1A DC current. FMAT7449-20 would only attenuate RF signal without reducing the DC current passing through the part. The versatile coaxial package uses TNC male to TNC female connectors.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	0.1		3	GHz
Impedance		50		Ohms
Attenuation Value		20		dB
Attenuation Accuracy		±5		dB
Input Power (CW)			2	Watts
VSWR			1.35:1	
Maximum DC Bias Voltage			100	Volts
Maximum DC Bias Current			0.1	A

Mechanical Specifications

Size	
Length, in [mm]	2.319 [58.9]
Width, in [mm]	0.63 [16]
Height, in [mm]	0.63 [16]
Weight, lbs [g]	0.088 [39.92]



Features:

- 0.1GHz to 3GHz Frequency Range
- Input Power 2 Watts (CW)
- 50ohm impedance
- Attenuation 20±5dB
- DC Bias Current 100mA Max
- VSWR < 1.35:1

Applications:

- Instrumentation
- Prototyping and characterization
- RF test systems
- Radar systems

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Configuration:

Design	DC Bias
Body Material and Plating	Brass, Tri-Metal

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Female
Contact Material & Plating	Beryllium Copper, Gold	
Outer Cond Material & Plating	Beryllium Copper, Gold	

Compliance Certifications (see for current document)

Plotted and Other Data

Notes: Values at 25 °C, sea level

Typical Performance Data

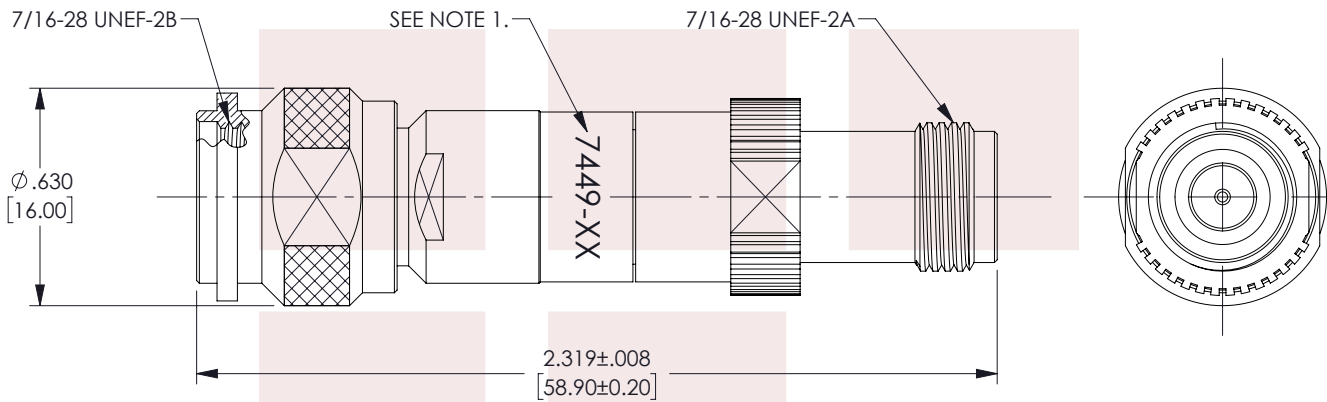
20dB DC Bias Attenuator 50 Ohm TNC Male (Plug) to 50 Ohm TNC Female (Jack) Up to 3GHz Rated to 2 Watts Brass Tri-Metal Body, 1.35:1 VSWR from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [20dB DC Bias Attenuator 50 Ohm TNC Male \(Plug\) to 50 Ohm TNC Female \(Jack\) Up to 3GHz Rated to 2 Watts Brass Tri-Metal Body, 1.35:1 VSWR FMAT7449-20](#)

URL: <https://www.fairviewmicrowave.com/20db-dc-bias-attenuator-tnc-male-tnc-female-2-watts-fmat7449-20-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/08/2022	SPONG



- NOTES:
- ITEM IS MARKED WITH ITEM NUMBER WHERE SHOWN. "-XX" DENOTES THE ATTENUATION VALUE, EXAMPLE: 7449-3 = 3dB, 7449-10 = 10dB, ETC.

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<p>Fairview Microwave an INFINIT[®] brand</p>	<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES: CABLE LENGTH (L) TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2 [5.08]</td> <td>FRACTIONS</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ±.02 [.51]</td> <td>± 1/32</td> <td>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ±.005 [.13]</td> <td>ANGLES ± 1°</td> <td>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td>300 [7620] < L = +5%L / -0</td> </tr> </table>		.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0	.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0			120 [3048] < L ≤ 300 [7620] = +6 [152] / -0			300 [7620] < L = +5%L / -0	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p>
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<p>SIZE A</p>	<p>CAGE CODE 3FKR5</p>	<p>DRAWN BY AKRESOWSK</p>	<p>ITEM NO. FMAT7449</p> <p>REV A</p>															

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